

All of the above species, except the first two, have been cited by many authors under various names. The following are some of them :

Lecanium hesperidum, L.—*L. lauri*, Boisdu., perhaps is the same.

Asterolecanium hederæ, Licht., was described as *Planchonia hederæ*, and again re-described as *Planchonia Valloti*, Licht., and probably *Asterolecanium massalongianum*, Targ., is the same.

Dactylopius citri, Risso., has the following synonyms : *destructor*, Comst.; *farinosus*, Deg.; *phyllococcus*, Ashm.; *brevispinus*, Targ.

Aspidiotus rapax, Comst. Synonyms : *camelliae*, Sign.; *citri*, Comst.; *evonymi*, Targ.; *lucumæ*, Ckll. and Town.

Aspidiotus hederæ, Vall.—For a long list of supposed synonyms of this species see Prof. Cockerell's first supplement to the Check List of the Coccidæ, 23 in all, after Berlese and Leonardi.

Aspidiotus Crawii, Ckll.—I retain this as being a valid species, although Mr. Marlatt finds it to be *A. cydoniæ*, Comst. He may find something else on the leaf or twig than is indicated by the label, and should not assume that the writer of the label saw it and confused it with the species indicated. Two more species are often found upon the same leaf and twig. *Aulacaspis elegans*, Leon, found by me on *Cycar-revoluta* in a greenhouse at Lawrence, Mass., had mixed with it on the same leaf *Aspidiotus hederæ*, Vall. Neither can the proportional number be estimated, by any means, by those found on a slide mount.

Chrysomphalus aonidum, L., as *Coccus aonidum*, L.; *Chrysomphalus ficus*, Ashm., and *Aspidiotus ficus*, Ashm.

C. dictyospermi, Morg., as *Aspidiotus dictyospermi*, Morgan, and *C. dictyospermi*, var. *jamaicensis*, Ckll. (*minor*, Berlese).

DESCRIPTION OF A NEW SPECIES OF HÆMATOPINUS.

BY HERBERT OSBORN, COLUMBUS, OHIO.

Hematopinus columbianus, n. sp.

Head longer than broad, semicircular in front, wider and more depressed behind the antennæ, rostrum projecting; antennæ located in front of the middle of the head, the first joint large, deeply set in the border of the head, second joint the longest, third, fourth and fifth nearly equal, fifth slightly smaller; a strong bristle is borne on the postero-lateral angle. The pronotum is short, rather narrow, and the sternal plate is very broadly ovate, almost circular, but the sides posteriorly tapering slightly

and the posterior border obtusely rounded or subtruncate. The second and third pairs of legs are nearly equal and considerably larger than the anterior pair, and their tarsal claws are broad and blunt or obtuse at tip. The abdomen is elongate, segments one to seven with prominent chitinous processes at margin; long stiff hairs are scattered rather sparsely over the disk and along the margins. Length of ♀ 1.20 mm., ♂ .75-.80 mm.

This species approaches *montanus*, Osb., in form, but is narrower and smaller. It differs also in the form of the sternal plate.

Described from a number of specimens taken from the Columbian *Spermophile*, *Spermophilus columbianus*, at Pullman, Washington, by Prof. C. V. Piper, in July, 1896. Type material in the U. S. National Museum.

BOOK NOTICE.

SYSTEMA LEPIDOPTERORUM HILDESLE (Second Part).—Phylogeny and Definition of the Families of the Butterflies. With genealogical tree and plate of neurulation. Mittheilungen aus dem Roerner Museum, Hildesheim, April, 1900. By A. Radcliffe Grote, A. M.

The author divides the diurnals into two series or superfamilies, Papilionides and Hesperides, and twelve families, giving diagnoses of the divisions. The classification is phyletic, and takes into consideration the facts of the scanty record from fossil material. As a result of these studies six larger associations of butterfly forms of general distribution are recognized, and as many smaller groups, inhabiting a restricted territory, and giving evidence in most cases of being survivals of once more extensive complexes. The nomenclature has been reviewed, and the author hopes the work may conduce to conformity in the treatment of the butterflies in literature.

DR. A. FENYES, of Pasadena, Cal., started on a collecting trip to the Atlantic Coast on the 1st of June, and will return to Pasadena in October.

DR. W. HOLLAND is to resign his position as Chancellor of the Western University in Pittsburg, the *Dispatch* of that city hears, to become Director of the Carnegie Museum.

Mailed June 30th, 1900.